

Reply to Office Action dtd. 27 February 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

(currently amended) An apparatus for checking hollow helicopter blade pressure,
 comprising:

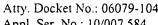
a digital pressure sensor-means; and

a pressure-tight fluid line having a first end and a second end, wherein-said first end being-connected to said digital pressure sensor means-and said second end being connected to an inlet valve of a hollow helicopter blade, whereby said pressure-tight fluid line formings a passageway between said digital pressure sensor means-and the hollow helicopter blade allowing high pressure gas to flow between said digital pressure sensor means-and the hollow helicopter blade.

- 2. (currently canceled)
- 3. (currently amended) The apparatus as defined in claim 12, wherein said pressure sensor means is powered by a <u>battery</u> power source.
- 4. (currently canceled)
- 5. (currently amended) An apparatus for filling a hollow helicopter blade, comprising:

 <u>a digital pressure sensor-means;</u>
 - a first pressure-tight fluid line having a first end and a second end, wherein-said first pressure tight fluid line being end connected at said first end to said digital pressure sensor means and being connected at and said second end connected to the hollow helicopter blade; and





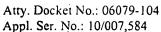
Appl. Ser. No.: 10/007,584

Reply to Office Action dtd. 27 February 2003



a second pressure-tight line having an inlet end and a outlet end, said second pressure-tight-line being connected at said inlet end connected to a gas supply and being connected at said outlet end connected to said first pressure-tight fluid line.

- 6. (currently amended) The apparatus as defined in claim 5, further comprising a pressure control valve connected to said second pressure-tight line to regulate flow of pressurized fluid from the gas supply to the hollow helicopter blade and said digital pressure sensor means.
- 7. (original) The apparatus as defined in claim 6, further comprising a relief valve connected to said pressure control valve to prevent over-pressurization.
- 8. (original) The apparatus as defined in claim 7, wherein said relief valve comprises a vent.
- 9. (currently canceled)
- (currently amended) The apparatus as defined in claim 59, wherein said digital pressure 10. sensor means is powered by a battery power source.
- 11. (currently canceled)
- 12. (original) The apparatus as defined in claim 7, further comprising a check valve disposed in said second pressure-tight fluid line between said pressure control valve and said first pressure-tight fluid line, whereby back flow from the hollow helicopter blade to said pressure control valve is prevented.
- 13. (original) The apparatus as defined in claim 6, further comprising an ambient temperature gauge.
- 14-16. (withdrawn)



Reply to Office Action dtd. 27 February 2003



17. (original) A method for filling and checking structural integrity of a hollow helicopter blade, comprising the steps of:

- (a) providing a gas supply and a hollow helicopter blade pressure check and fill apparatus having a control valve, a digital pressure sensor, a check/fill outlet, and a gas supply connector;
- (b) allowing the apparatus to stand near the blade for five minutes to equalize apparatus temperature;
 - (c) closing the control valve;
- (d) connecting a hose at one end to a gas supply and its other end to the gas supply connector;
 - (e) starting flow of higher pressure fluid from the gas supply to the control valve;
- (f) opening the control valve to start flow of higher pressure fluid from the gas supply to a predetermined pressure level to purge the apparatus;
 - (g) connecting another hose to a helicopter blade valve and to the check/fill outlet;
 - (h) closing the control valve;
 - (i) opening the helicopter blade valve;
 - (j) observing reading of the digital pressure sensor;
- (k) opening the control valve to start flow of higher pressure fluid from the gas supply to the hollow helicopter blade to a predetermined pressure level;
 - (l) closing the control valve after a predetermined time period;
- (m) observing internal pressure of the hollow helicopter blade displayed on the digital pressure sensor;
- (n) closing the helicopter blade valve when the observed internal pressure of the hollow helicopter blade displayed on the digital pressure sensor reached a desirable level;
 - (o) stopping flow of higher pressure fluid from the gas supply to the control valve;
- (p) disconnecting the another hose from the helicopter blade valve and to the check/fill outlet;

Atty. Docket No.: 06079-104 Appl. Ser. No.: 10/007,584

Reply to Office Action dtd. 27 February 2003



- (q) bleeding residual pressure from the apparatus by opening the control valve for a predetermined time period;
 - (r) disconnecting the hose from the gas supply and the gas supply connector; and
- (s) opening the control valve fully bringing the internal pressure of the apparatus to ambient conditions.
- 18. (original) The method as defined in claim 17, wherein the predetermined time period of step (l) is one minute.
- 19. (currently amended) An hollow helicopter blade pressure apparatus, comprising:

 <u>a digital pressure sensor-means;</u>

a pressure-tight fluid line having a first end and a second end, wherein-said first end being-connected to said digital pressure sensor means-and said second end being connected to an inlet valve of a hollow helicopter blade forming a passageway between said digital pressure sensor means and the hollow helicopter blade allowing high pressure gas to flow between said digital pressure sensor means and the hollow helicopter blade; and

wherein said pressure-tight fluid line is connectable being further capable of being connected to a gas supply to fill the hollow helicopter blade when the hollow helicopter blade is below a predetermined pressure level.

- 20. (currently canceled)
- 21. (currently amended) The apparatus as defined in claim 1920, wherein said pressure sensor means is powered by a battery power source.
- 22. (currently canceled)